

Name(s) of Risk Team Members: Edward Lessard and Michael Kretschmann			Point Value → Parameter ↓		1		2		3		4		5			
Area/Facility Description Title: Collider-Accelerator Department			Occupancy or Use		≤once/year		≤once/month		≤once/week		≤once/shift		≥once/shift			
Area/Facility # (if applicable): Facility Wide – FRA 2-05																
Area/Facility Description: Facility-Wide Fire			Severity		First Aid Only		Medical Treatment		Lost Time		Partial Disability		Death or Permanent Disability			
			Likelihood		Extremely Unlikely		Unlikely		Possible		Probable		Multiple			
Approved by: <i>E. Lessard</i> Date: 3/21/05 Rev.#: 0																
Reason for Revision (if applicable):									Comments:							
					Before Additional Controls							After Additional Controls				
Physical Item or Activity		Hazard(s)	Control(s)	Use A	Severity B	Likelihood C	Risk* AxBxC	Control(s) Added to Reduce Risk				Occupancy A	Severity B	Likelihood C	Risk* AxBxC	% Risk Reduction
Electrical Fire		Smoke And Heat	Fire detection & suppression systems; equipment protective systems; ASSRC/ESRC reviews; Fire Hazards Analysis; Fire stops; all equipment is listed or reviewed by CEE; Tier 1 inspections; maintenance; electrical & life safety code compliance; emergency procedures; EMTs & BNL fire rescue; removal of unused cable; ASE requirements; audible alarms; evacuation procedures and training; upgrading fire alarm panels	5	2	4	40	The ongoing replacement of approximately 6,000 faulty Edwards’s 281A heat detectors lab wide is on schedule. Instituted policy to replace RF power supply capacitors after lifetime is reached. New Fire Hazards Analyses for accelerator facilities are being drafted. New front-end site-wide fire alarm system allows more monitoring ability.				5	2	3	30	25 %
Flammable Liquid Fire		Smoke And Heat	Fire detection & suppression systems; procedures; training; chemical segregation; volume controls; fire cabinets; MSDS; Tier 1 inspections; storage controls; ventilation; labeling; ignition source control	5	2	2	20									
Flammable/Explosive Gases Fire		Smoke And Heat	Fire detection & suppression systems; procedures; training; equipment protective systems; ASSRC/ESRC reviews; Fire Hazards Analysis; Tier 1 inspections; maintenance; emergency procedures; BNL Fire Rescue; ASE requirements; volume controls; segregation controls; labeling; area posting; gas detection interlock systems	5	5	1	25									
Combustible Material Fire		Smoke And Heat	Fire detection & suppression systems; procedures; training; equipment protective systems; all equipment is listed or reviewed by CEE; Tier 1 inspections	5	2	3	30	Reducing combustibles in the workplace in compliance with OSHA requirements. New enhanced housekeeping policy in place.				5	2	2	20	33%
Chemical Fire		Smoke And Heat	Fire detection & suppression systems; procedures; training; equipment protective systems; all equipment is listed or reviewed by CEE; Tier 1 inspections, Fire Hazards Analysis	5	2	3	30									
Dry Vegetation Fire		Smoke And Heat	Fire breaks; maintenance of fire breaks; procedures; training; BNL site-wide warning alarm system; Fire Hazards Analysis; Tier 1 inspections; Emergency procedures; BNL Fire Rescue	5	1	2	10									
Natural Phenomenon		Lightning And Subsequent Fire	Fire Hazards Analysis for lighting risk, lightning protection where required	5	1	2	10									
Radiation Energy Deposition (Targets) - Fire		Smoke And Heat	Fire detection & suppression systems; procedures; training; equipment protective systems; ASSRC/ESRC/RSC reviews; Fire Hazards Analysis; emergency procedures; BNL Fire Rescue; ASE requirements; access control system; cooling water systems; target monitoring; radiation monitoring	1	1	2	2									
Further Description of Controls Added to Reduce Risk:																
*Risk:		0 to 20		21 to 40		41-60		61 to 80		81 or greater						
		Negligible		Acceptable		Moderate		Substantial		Intolerable						